



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,618	07/29/2003	Laurence N. Bascom	HT3830 US NA	8666

23906 7590 01/04/2006

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER
----------

PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/630,618

Applicant(s)

BASCOT ET AL.

Examiner

Jeremy R. Pierce

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 and 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on November 4, 2005 has been entered. Claims 1-8, 10, and 19-25 have been cancelled. Claim 9 has been amended. Claims 9 and 11-18 are currently pending. The cancellation of claims 1-8 and 10 renders the rejections made against them in the last Office Action moot.

### ***Claim Objections***

2. Claim 9 is objected to because of the following informalities: Claim 9 does not consist of a single sentence. The provisos added at the end of the claim come after a period. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 11-15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (US 2004/0060119) in view of Monfalcone et al. (US 2003/0082972) and Forsten et al. (U.S. Patent No. 5,578,368) and further in view of Keller et al. (U.S. Patent No. 6,174,584).

Murphy et al. disclose a fire barrier fabric layer comprising cellulose fibers and organic fibers (Table 1). The fabric may weight between 0.25 and 8 osy (paragraph 38) and may be 50/50 Visil/Kevlar (Table 1). Visil is a viscose fiber that contains silicic acid and Kevlar is a para-aramid fiber.

Although Murphy et al. do not explicitly teach the limitations of percent fiber retained upon heating to a certain temperature, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. similar cellulosic fibers and similar organic fibers) and in the similar production steps (i.e. blending fibers) used to produce the fire retardant fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed retention percentages would obviously have been provided by the process disclosed by Murphy et al.

With regard to the limitation for fabric density, Murphy et al. teach that the various design parameters may be varied (paragraph 38), but do not disclose any particular fabric density. Monfalcone et al. also teaches a flame retardant fabric that is useful in mattresses (paragraph 29). Monfalcone et al. teach that density of a fire retardant fabric relates to its ability to form a barrier (paragraph 39). The basis weight (paragraph 38) and thickness (paragraph 39) values disclosed by Monfalcone et al. create density values that anticipate Applicant's claimed range. It would have been obvious to a person having ordinary skill in the art at the time of the invention to create the fire retardant fabric of Murphy et al. with a density of at least 0.16 g/cc in order to provide a fabric with the desired amount of barrier properties, as taught by Monfalcone et al.,

since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272 (CCPA 1980).

With regard to the limitation for air permeability of the fabric, Murphy et al. do not disclose any particular values. Air permeability is directly related to basis weight and density of the fabric, which have previously been rendered anticipated by or obvious over the prior art. Additionally, Forsten et al. teach a fire resistant layer comprising aramid fibers (Abstract). Forsten et al. disclose that air permeability should be kept low so that fire does not spread through the fire retardant layer (column 3, lines 10-25). It would have been obvious to a person having ordinary skill in the art at the time of the invention to create the fire retardant fabric of Murphy et al. with an air permeability of 70 m/min. or less in order to provide a fabric that is an effective barrier to fire, as taught by Forsten et al., since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Murphy et al. teach the barrier fabric may be quilted to a ticking layer (paragraph 42). Murphy et al. do not disclose a basis weight for the ticking. Keller et al. teach that outer covering layers for mattresses should weigh between 100 and 500 gsm in order to provide comfort (column 2, lines 51-56). It would have been obvious to a person having ordinary skill in the art at the time of the invention to provide an outer ticking to the fabric of Murphy et al. within the claimed basis weight in order to provide a mattress that is comfortable for sleep, as taught by Keller et al.

With regard to claim 12, Murphy et al. teach using poly(p-phenylene terephthalamide) fiber (paragraph 34). With regard to claims 14 and 15, Murphy et al.

Art Unit: 1771

disclose adding oxygen depriving modacrylic fibers to the fabric (paragraph 34). With regard to claims 17 and 18, Murphy et al. teach the barrier fabric may be quilted to a ticking layer using fire-retardant thread, such as para-aramid thread (paragraph 42).

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. in view of Monfalcone et al., Forsten et al., and Keller et al. as applied to claim 9 above, and further in view of Mater et al. (US 2004/0198125).

Murphy et al. teach using off gassing material, but fail to teach polyvinylchloride fibers. Mater et al. teach that halogenated fibers provide oxygen depleting gases when exposed to flames (paragraph 1). Mater et al. also teach that polyvinylchloride fibers are equivalent to modacrylic fibers for such a purpose (claim 45). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use polyvinylchloride fibers instead of modacrylic fibers as an off gassing fiber in Murphy et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 1771

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 9 and 11-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/630,081. Although the conflicting claims are not identical because different properties are recited, they are not patentably distinct from each other because both sets of claims are directed to similar structural material comprising mattress components and a fire blocking fabric comprising cellulosic and organic fibers.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

8. Applicant's arguments filed November 4, 2005 have been fully considered but they are not persuasive.

9. Applicant argues that Murphy et al. require a two-layer fire barrier whereas Applicant's fire barrier is limited to one fireblocking fabric. Applicant supports this argument by noting that the fire barrier fabric of Murphy et al. requires a fire barrier layer and a thermally insulating layer. Applicant points out that both of these layers use at least one char-forming flame retardant fiber. However, this argument fails because of the current claim language used to define the present invention. First, claim 9 uses

Art Unit: 1771

open-ended "comprising" language as the transitional phrase. Thus, other layers are not precluded from being present in the prior art. Specifically, the thermally insulating layer taught by Murphy et al. is not precluded from the claims. Second, the fire barrier fabric of Murphy et al. meets the claimed limitations of Applicant's fireblocking fabric by itself.

10. Applicant argues that the thermally insulating layer also provides fireblocking capabilities. However, Murphy et al. make it clear that the thermally insulating layer serves a function separate from the fire barrier layer (paragraph 37). Applicant's argument is also predicated on an intended use of the thermally insulating layer of Murphy et al. But the inventors of the Murphy et al. patent clearly intended the use of the layer to be a thermally insulating layer because that is what they named it.

11. Applicant provides no argument as to the Double Patenting rejection set forth in the previous Office Action and maintained in the current Office Action.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



Art Unit: 1771

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on normal business hours, but works flextime hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeremy R. Pierce  
December 15, 2005



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700